

# Editorial

# JOURNAL BOX

## What Price Progress?

Recently I was one of the many modellers who were offered six super-detailed, gold plated, ready to run, NSW locomotives for the average price of \$52-00 each, or the alternative of purchasing them separately, as a standard kit, at an average price of \$60-00 each.

This lead me to thinking of the remarks I often hear when a gathering of railway modellers are discussing Australian Prototype - how there is not enough available, how it is not available in a particular gauge or scale, how it is expensive, how it is crudely finished, etc.

I wonder how many of our present day modellers realise that Australian manufacturers have been producing Australian Prototype in one gauge or another for the past 30 or more years? Names like Ferris, Austral, Sentinel, Prototype, etc., to mention a few. They have offered models in most materials from cardboard through tinplate and balsa to diecast metal and plastic.

I may be a cynic, but I really cannot see the Australian manufacturer making his fortune in this field - not whilst modellers tend to specialise in the locos and rolling stock of their home state. The average Australian modeller, to my knowledge at least, seems to be rather a "loner" to whom

## COVER PHOTO:

THE TIM DUNLOP CUP winner for 1970 is the HO model of a VR "X" class loco by W. Brisbane of Victoria.

## Volume 20

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## Issue 91

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# THE SECRETARY'S DESK



We start off with a "beef". WOULD MEMBERS WHEN CHANGING THEIR ADDRESS, PLEASE ADVISE THE FEDERAL REGISTRAR, MRS. JUNE DUNN, DIRECT. The same applies with application forms and subs, this will eliminate complaints of not getting Journal and does save time and un-necessary double postage, those members who do not renew their subs within the two months grace period, may in future, be required to pay the postage on any Journals issued between Oct. and the date the member eventually renews. This is now common procedure with many organizations to-day.

Now I include by courtesy of Railway Modeller an extract from their Scrapbox in last Nov. issue, which could be of interest to State and Sub Branches "One of the commonest mistakes in our hobby is the belief that the main purpose of the average club is the construction of a joint layout. This is just not so. Even in the exceptional case of the well organized, exclusive groups built up around a single layout, the operation of the line is, if anything, more important, but in a general purpose club which covers every shade of opinion in the hobby, the main reason people join is to meet fellow enthusiasts, to learn more of the hobby and to help run a layout.

Unfortunately, in many clubs the eccentric minority who want to build the darn things take over the entire club room. Those members who want to natter or, even heinous, run their stock over the sacred metals, are simply holding up proceedings. Anyone who does not wield a saw, screwdriver or soldering iron to good purpose during the meeting is regarded as a renegade and

duly castigated in the club journal.

What is so often forgotten is that whereas twenty people can meet in a clubroom to exchange views, study static models suitably displayed, and generally enjoy themselves and learn something of value, less than ten can operate a club layout, while no more than five can work on it without falling over one another. What is more important is that a well appointed, comfortable clubroom, coupled with a tea bar run on commercial lines will give better value to more people and make money. While I wouldn't suggest turning the society into a social club, there is little doubt that the majority of club members favour the social side of the hobby".

In the same article there are also comments on exhibitions, which I think would also apply to our exhibitions in Australia and are worth reading by those concerned.

## Editorial (contd.)

everything "foreign" is abhorrent. Foreign can mean the NSW modeller will have nothing to do with VR and visa-versa. Perhaps this is a heritage from our different gauges in the various states, or perhaps it is just a basic trait in the Australian make-up.

I don't think I will be buying 6 gold plated NSW locomotives, perhaps I would rather have 6 locos, one from each state - but then \$52-00 each?? Perhaps I am not an average modeller. However, I am sure the enterprising manufacturer making this offer will sell all his 100 sets of 6 locos.



# 1970 Competition Results

TIM DUNLOP CUP - for scratch built locomotive, awarded to:

Warwick Brisbane,  
2 Moray Street,  
East Bentleigh, Vic. 3165.

for his HO model of an X class 2-8-2 locomotive.

N.S.W. BRANCH TROPHY. - for scratch built rolling stock, awarded to:

Ken Edwards,  
23A Milner Avenue,  
Hornsby, N.S.W. 2077.

for his HO model of a N.S.W.R. HFN Composite Brake (passenger).

VIC. BRANCH TROPHY - for rolling stock conversion from commercial kits, awarded to:

Ken Edwards.

for his HO model of a N.S.W.R. S wagon ex Airfix mineral wagon.

FEDERAL AWARD - normally Loco Conversion but this year only for best scratch built freight vehicle, awarded to:

Graham Ball,  
52 Parry Avenue,  
NARWEE, N.S.W. 2209.

for his scratch built CR. LEX Box Car.

CANDEMAH CUP - for lineside equipment, awarded to:

Phil Larmour,  
42 McMillan Street,  
Yagoona, N.S.W. 2199.

for his S.A.R. Coaling Cantry.

Other items submitted were:

Scratch built N.S.W.R. C32 loco by Cedric Rolfe.

Scratch built V.R. AW carriage & V.R. CE van by W. Brisbane.

Scratch built N.S.W.R. MLE flat wagon, and conv. N.S.W.R. ABV Biscuit van by Ken Edwards.

Scratch built V.R. Q32 Well wagon by Rex Little.

Scratch built Nepean Milkvan, SAR Insulated van, N.S.W.R. Sanding Tower, by G. Ball.

Scratch built N.S.W.R. MBC, CHG, GME, MRC, and MHG with all interior fittings, and W.A.G.R. WVX, also conv. N.S.W.R. BCH Hopper, by Phil Larmour.

## Comments on the 1970 Competitions.

This year there was a falling off in the number of entries but not of quality.

There was some very close margins between the winners and the runners-up, this lead to the committee switching one of the trophies from the section, Best Loco Conversion, for which there were no entries, to be awarded to the best scratch built freight vehicle.

To overcome this problem in future, Keith Wilcox will donate a trophy for the best scratch built goods vehicle, N.S.W. will now award a trophy for the best scratch built passenger vehicle.

Phil Larmour is only 16 and sets an example that could be followed by many others.

Another reminder from the judges Jack Shambler and Allan Taylor against painting models in full gloss.

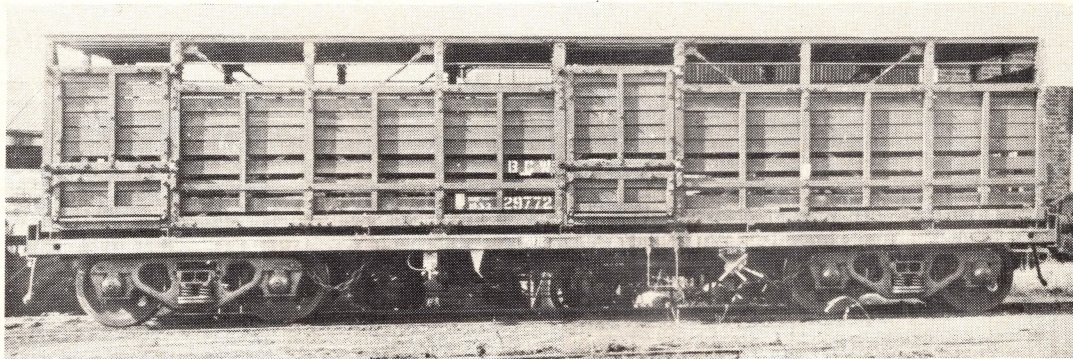
Now let's have many starters for next year's competitions.



# Build a N S W R B C W

Photos by J. Parker.

by J. PARKER.



Scratch building can take a long time and the finished model is quite often the result of numerous trial runs and experiments. This was the case when I built a HO model of a NSW Bogie Cattle Wagon, the third attempt producing a reasonable example. In these notes I intend to set out the method I eventually arrived at and so, I hope, considerably speed up the process for anyone who has the inclination to build one, (or better still, two or three), of these wagons.

One of the time saving dodges I came across was the use of pre-machined wood. Pre-machined wood is available at hobby shops and comes in sheets with a series of grooves machined on one side to represent three inch wide planks in HO. All one has to do to get a strip a scale three inches wide is to cut off one plank, for six inch strips cut off two planks and so on. When constructing this model you will need strips of three different widths, these are three inch, four and a half inch and six inch or, in other words, one plank, one and a half planks and two planks wide. However, before you madly get busy with a modelling knife, read on, and you will save even more time.

At this stage it might be advantageous to make a brief resume of the materials you will need to make this model.

The pre-machined wood I obtained was in sheets one thirty-second by two and three-quarter by twelve inch. Allow one sheet per wagon if you are building several models and even if you are only building one, you should obtain at least two or three sheets. Some one eighth of an inch thick wood will be required for the floor and some good quality card for the roof. You will also need a set of buffers, couplings and bogies and some wire about the same thickness as a pin. I should emphasize that if you are going to follow the dimensions given in this article, the floor must be one eighth inch thick and the pre-machined wood must be one thirty-second inch thick. If thicker or thinner material is used an inaccurate model will result.

Under the heading of tools required comes a piece of non hygroscopic transparency, (such as a shirt box lid), a couple of dozen pins, some PVA glue and a sharp hobby knife. Make sure the knife is sharp, otherwise it will split the wood and not cut it.



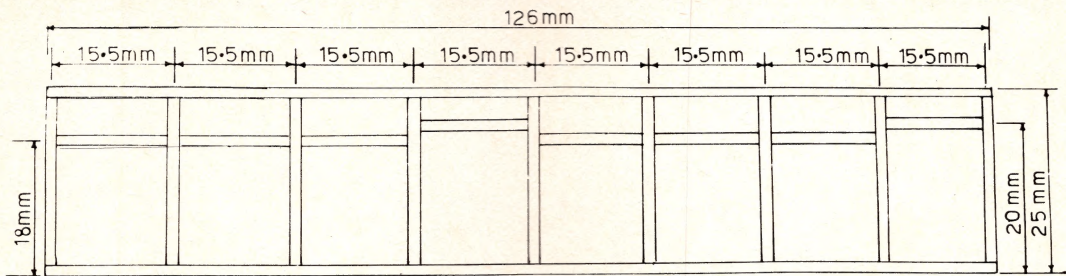


FIGURE ONE  
PATTERN FOR MAKING SIDE ASSEMBLY

### THE SIDES.

The first step in making the sides is to copy, trace, or otherwise transfer the diagram in figure 1. onto a piece of paper, this diagram is the pattern on which we will set out the various bits and pieces. Dimensions are given in millimetres for a three and a half millimetres per foot model.

Now take the diagram and fasten it onto the working surface with sticky tape, then take a suitably sized piece of transparency and fasten it over the diagram. This transparency will prevent the side of the model from sticking to the paper when we start assembly. By the way, the working surface should be of some material into which pins can be pushed easily, otherwise very sore thumbs will result! A piece of thick cardboard should suffice if nothing else is available.

Before you make the pieces for the framing, examine the unmachined side of the piece of wood. Any blemishes, saw marks, etc. should be sanded off, as this is the surface that will show on the finished model.

The framing pieces can now be made. Taking the sheet of pre-machined wood, cut a piece off the end which is 22mm. wide. This width is the same dimension as the length of the vertical struts required, and when you cut the piece into strips, the vertical struts

will be all the same length. Eighteen strips will be required and they are one and a half planks wide.

Make the horizontal pieces just under the opening under the roof in the same manner. This time the piece of machined wood you cut off the sheet will be 14mm. wide, and sixteen strips one and a half planks wide are needed.

Next come the upper and lower horizontal pieces, you only need four of these, so simply measure off and cut pieces which are 126mm. long and again one and a half planks wide.

Now you can begin assembly. The struts are laid on the pattern and held in position with pins. (the pins, of course, are pushed in alongside the struts, not through them). Use the glue sparingly, you only need a drop where the struts are butted together and assemble all the pieces cut so far in one operation. (All the pieces necessary for one side, that is). Make sure that the pieces are laid down with the machined side uppermost.

The reason for assembling the pieces in one operation is that you will be lucky indeed if all the pieces line up dead square and parallel and slight adjustments will be needed before the glue sets. Now here's a little tip to remember in all your modelling - it is a peculiarity of the human eye that it can tell whether lines are parallel



or not, but it can't tell if lengths heights, widths, etc. are a millimetre out.

The side planks are now cut, these are 123mm. long, (slightly shorter than the sides to allow the ends to be fitted), and two planks wide. Fourteen will be needed so you can cut a piece of machined wood 123mm. long and strip off the necessary lengths.

The side planks can be fitted once the glue on the side has dried sufficiently. Don't waste time individually glueing them in position, simply squeeze glue down the length of the vertical struts and lay the seven planks in position in as many seconds. Now you can poke and prod them into position, noting that the gap between the lower planks is wider than that between the top planks. A couple of weights, (coins will do), will hold everything in position while the glue sets.

Once the glue has dried you can remove the side from the pattern and commence making the other side. The doors in the BCW are diagonally opposite, so you can make each side to the same pattern.

When you have finished making the second side, the glue on the first side would be hard dry and you can build up the framing for the doors and add the other vertical pieces. Some of these pieces are very fiddly, but picking them up on the end of a pin helps. Note that the additional vertical pieces do not go right to the floor, but finish flush with the bottom edge of the bottom plank. These pieces are made from strip one plank, (a scale three inches), wide.

Add the steel that runs the opening just below the roof, and you could also add the cross bracing if you felt inclined.

When framing is complete the side should be placed face down on a piece of fine sandpaper and gently smoothed off - you will be surprised at how much this improves the appearance.

#### SCHEDULE OF STRIPS REQUIRED.

Width	Length	Quantity
1.5mm.	22mm.	18
1.5mm.	14mm.	16
1.5mm.	126mm.	4
2mm.	123mm.	14
1mm.	15mm.	12

#### THE FLOOR.

I used one eighth inch marine ply for the floor. This material can be relied upon to make a good strong floor which retains screws, will remain warp free and will not split. However, I must admit that the real reason I used it was that a piece happened to be handy when I was looking for something to make the floor out of. The more common material, balsa, is not really suitable as it is too soft and lacks strength. It should be considered, though, that marine ply or any similar material requires a trip out to the garage/workshop where much drilling, sawing, and spokeshaving takes place, whereas balsa can be worked at the kitchen table with a hobby knife. Whatever material you use is up to you, but if you use balsa you should glue a piece of harder material on the centreline of the floor inside the vehicle to take the bogie and coupling mounting screws.

If you look at the photo you will notice that the body of the BCW sits right down over the bogies and in order to produce this effect in the model it is necessary to make holes in the floor to accommodate the flanges. The usual remedy of raising the floor inside the body can not be applied in this case because of the open nature of the BCW.

Cut the floor to the dimensions given in figure two, make and attach a bogie



bolster, and make all necessary holes, including holes for the bogie and coupling mounting screws. If you leave these holes till later, the effort required to make them will be detrimental to the rest of the model.

### THE ROOF.

You can make the roof by sandwiching two pieces of card together against the side of a tin of suitable radius. The tin you use should be 126mm. diameter, but this is not critical and slightly more or less than this will do. The tin I used measured 135mm.

The two pieces of card, (sizes given in the schedule), are glued together and taped onto the tin with the smallest piece to the inside. When the glue has dried the car will retain the shape of the tin. String or rubber bands can be used instead of tape, but more care is needed, because pulling them too tight will leave transverse grooves in the roof.

### SCHEDULE OF CARD REQUIRED.

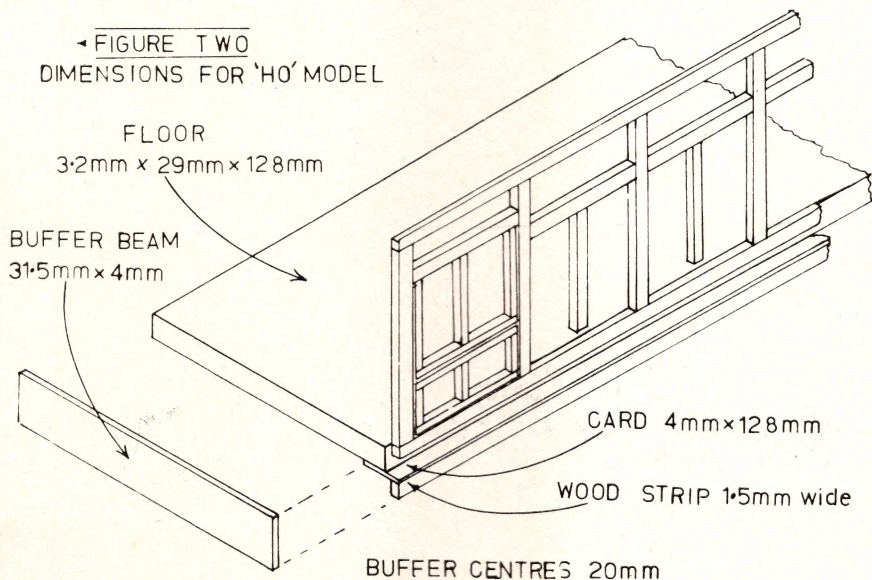
129mm. x 35mm.  
120mm. x 27mm.

### ASSEMBLY.

Begin assembly by glueing the side to the floor. Glue them with the top edge of the bottom horizontal member flush with the top surface of the floor making sure that they are vertical. The floor is longer than the sides so take care that the sides are centrally placed, with equal lengths of floor sticking out at each end. (See Fig.2.)

The ends can be built up next, planks are cut the same length as the floor is wide (29mm.) and glued in one at a time. As you need eighteen of these planks and they are all the same length, they should be made by the method described earlier, that is by cutting a piece of machined wood the same width as the planks are long and stripping them off. The planks are a scale six inches wide and the cross bracing is three inches wide.

That small piece of card that fits on the end directly under the roof is made by using the roof making tin as a cutting template. Cut a fairly long arc using the periphery of the tin to guide the knife and slice off pieces that have their straight side equal in





length to the width of the vehicle.

You will find that the roof is a little oversize if you have made it to the dimensions given, this is to allow it to be trimmed to fit your individual model. However, before you fix the roof in place make sure that all work on the interior is complete, including painting and adding weight. The open nature of the BCW makes painting the interior vital.

Cut a piece of card 128mm. long by about 4mm. wide, and a strip of wood 128mm. long and a scale  $4\frac{1}{2}$  inches wide, (one and a half planks on our pre-machined wood), and fit them under the floor as shown in figure 2. Also fit the buffer beam as shown.

If you intend building one of these wagons for a special purpose, (such as an entry in an AMRA contest), it might be worth while adding details such as the metal strapping and hinges. However a lot of very fine work would be needed and if the wagon is mainly intended to add variety to your rolling stock roster, superdetailing is simply not worth the effort involved. This is especially so when you consider that you could probably build another BCW in the time taken.

All that needs to be done now is to attach the fittings and paint. The prototype BCW is painted black and sun-

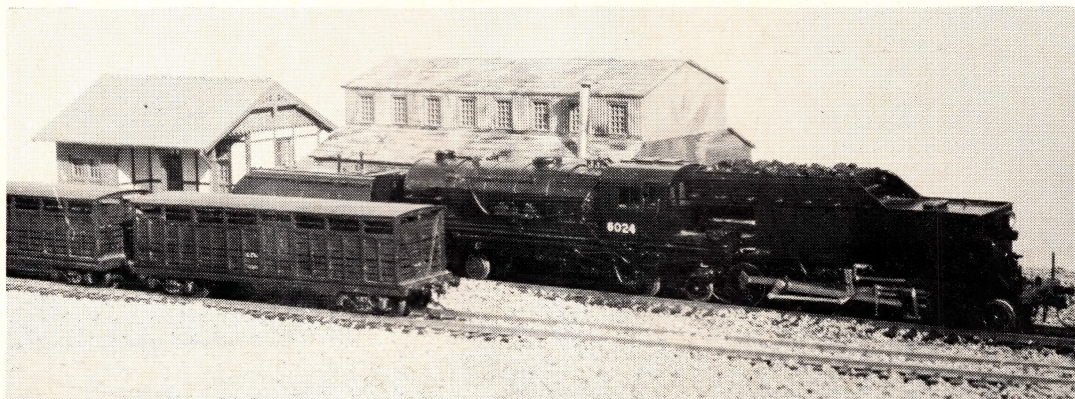
light gradually bleaches this to a greyish colour, an effect difficult to reproduce in the model. If you are feeling courageous, you could, after painting flat black, leave the model in strong sunlight for a few days.

Now I've heard of these people who weather their cement hoppers with actual cement, their coal trains with actual coal dust and so on, but I'm not going to name the most appropriate material to weather a cattle wagon with. Come to think of it, though, one advantage of using the prototype material would be that you would reproduce the prototype smell.

#### NOTES ON THE DRAWINGS.

All the dimensions given in the drawings are for HO, 3.5mm. per foot scale, modellers in other scales should make the appropriate adjustments. Figure 2. shows how the parts are assembled, I have omitted the side planks for clarity.

In the schedule, I have, for the sake of uniformity, given the width of the strips in millimetres. At 3.5mm. per foot, one millimetre is close enough to three scale inches and those of you who are using the machined wood method of making the strips should read "planks" instead of mm. in the list of widths given.





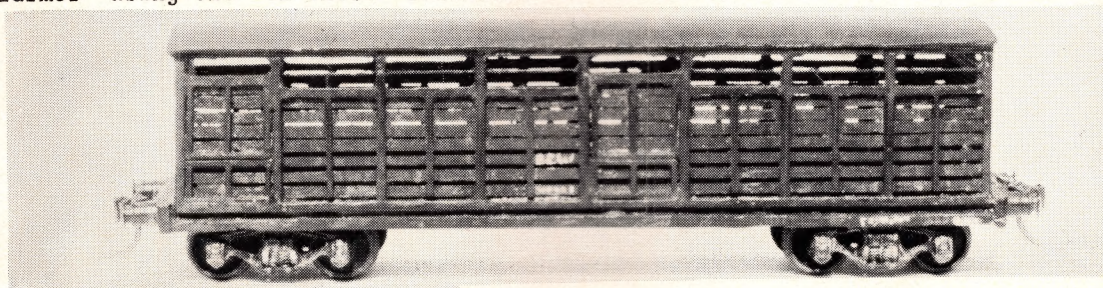
TO CONCLUDE.

Perhaps you are a beginner at scratch building and you have followed this article, built a BCW, and are not too happy with the result. Well don't worry, the next one will be better and in the meantime that BCW that you consider is not worth the cost of couplings and bogies can be put to other uses. For example, it could be set up as a flammable liquid storage shed and I can imagine an enterprising farmer using one of these redundant

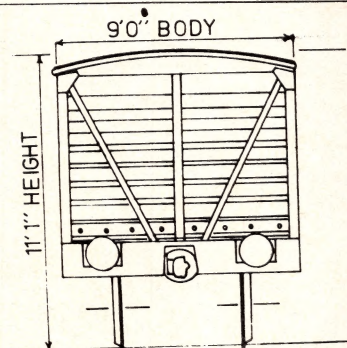
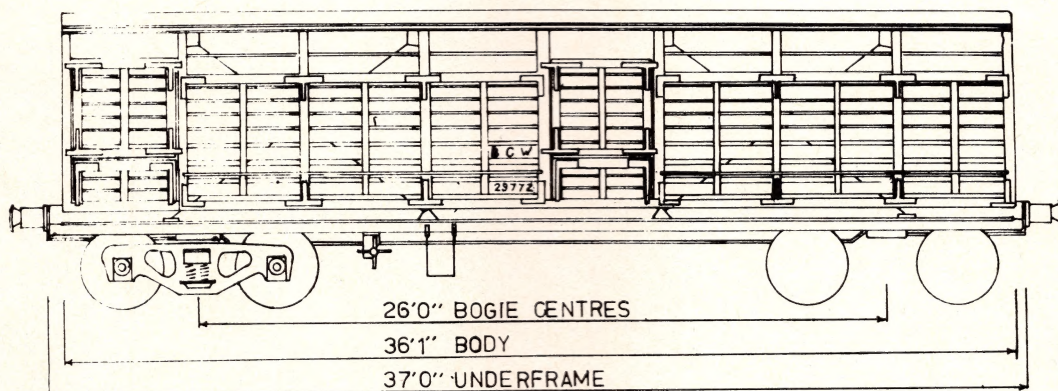
wagons to house his chooks. Another possibility would be to smash it up load it into a couple of open wagons and you have a train on the way from the scene of a wreck.

FINALLY.

In this article I have attempted to give enough information to enable you to build a model without having to refer to other sources of information, so if you build a BCW write to Journal and let us know how you got on.



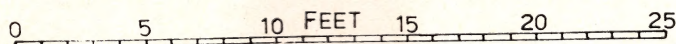
The Finished Model.



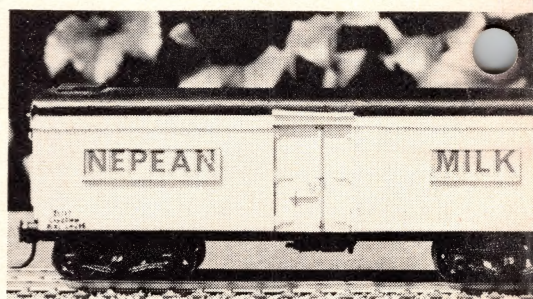
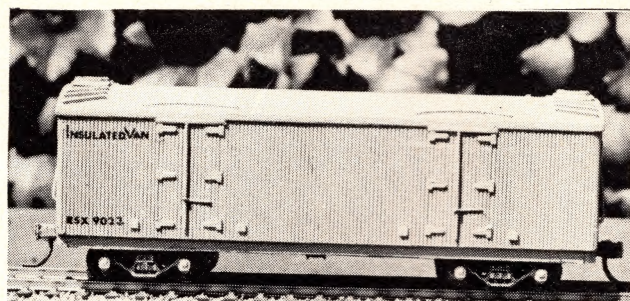
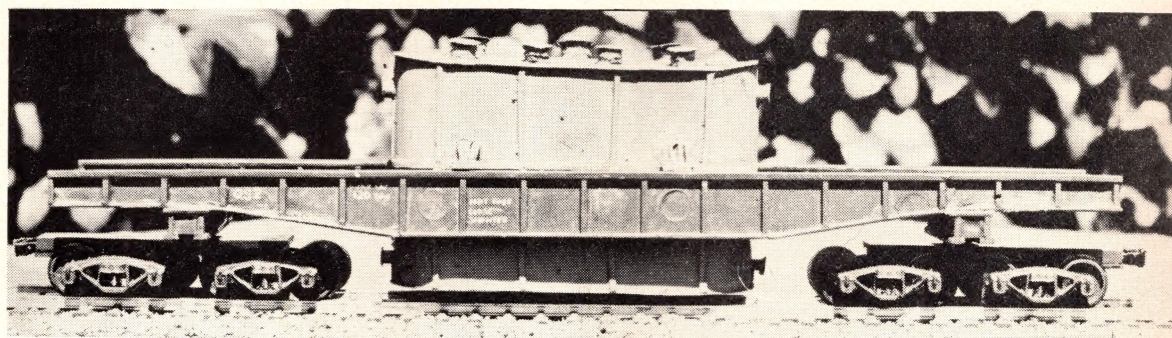
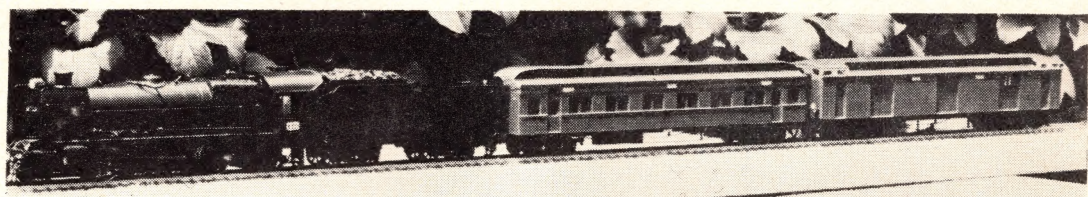
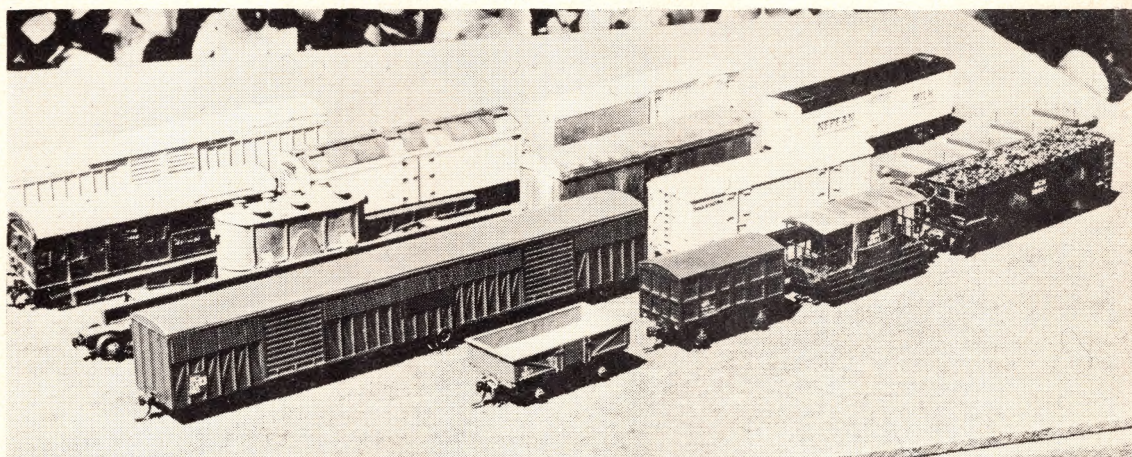
< N S W G R >  
BOGIE CATTLE WAGON  
CODE BCW

BOGIES - 2AQ WHEELBASE 5'9"  
WHEELS 37" DIAMETER  
NUMBERED 29725-29824  
COLOUR - BLACK WITH WHITE  
LETTERING  
ROOF CURVE - RADIUS 18'

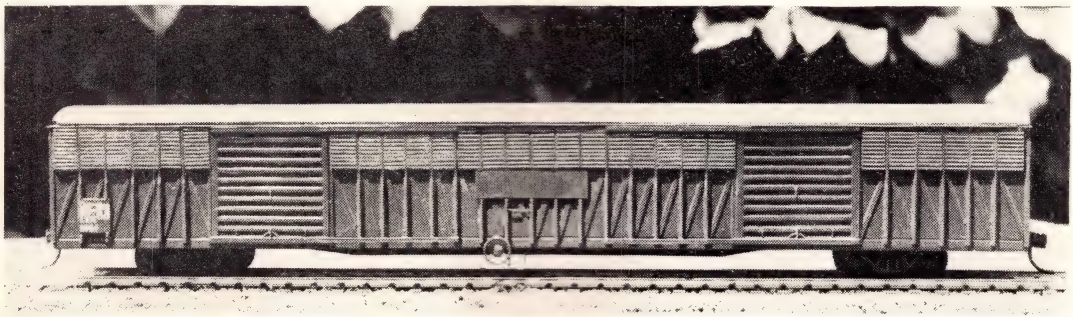
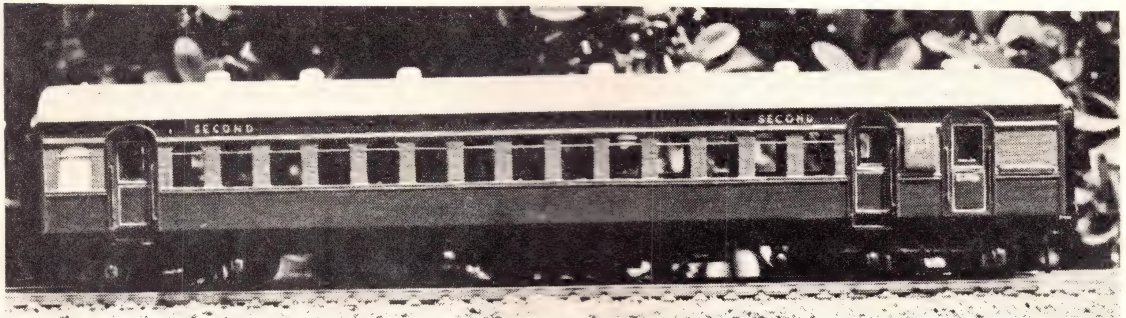
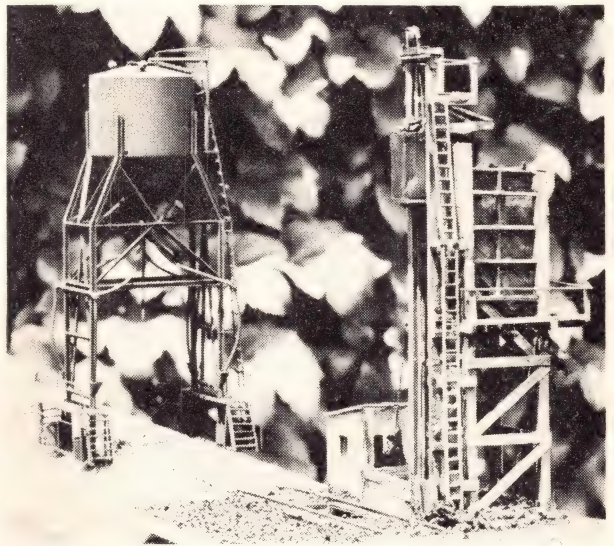
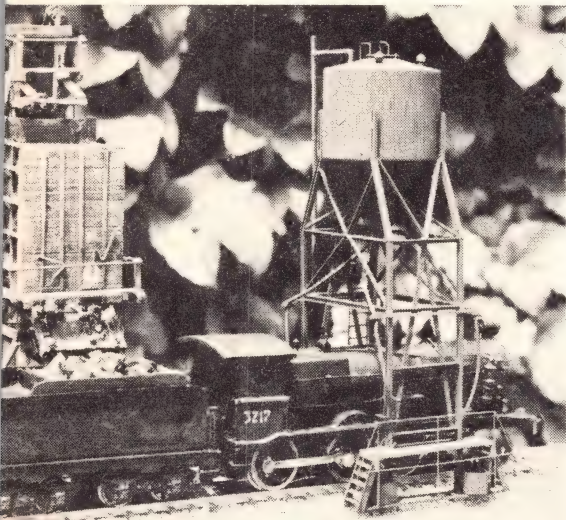
PREPARED FOR A.M.R.A. BY J PARKER











1970 Competition Entries.



# Mini Switches And Mini Panels

Final of a Series.

1. Next to money, space is our most scarce commodity.

2. What space we have should be devoted as much to the layout and as little to operating space as possible.

3. Operating space can be reduced by keeping operating panels small.

This was the logic which started me thinking along the lines which eventually led to the "mini" panels and components on my own layout and to a considerable reduction in size in the panels used by the MMRS (Melbourne Model Railway Society). When I talk about mini panels, I really mean mini - my terminal has two platform roads, four other sidings, a headshunt, a two road engine shed (two locos per road) and two "run-around" crossovers. The control panel for track power and point control measures 21" x 4½" and of this space, 11" x 4½" is left bare for attaching a time-table. Interested? Quite a few members have shown a great interest, particularly when they find that a whole panel can be built for under a dollar - panel, brackets, components, the lot!

Before I start to describe the components, let me make it quite clear that in miniturising, I am not prepared to compromise reliability. Club operation is the real test for reliability and the components have survived years of operation on the MMRS station panels, with no breakages and only an occasional running repair. Operation must also be reliable and this has been well tested on the MMRS layout.

All four switches described are designed to suit a "diagram" type panel, where ¼" wide "Dymotape" represents the track.

by ALLAN DOWEL.

## Mini Components.

The first component to be described is the SPDT mini-switch. This is used for two purposes:

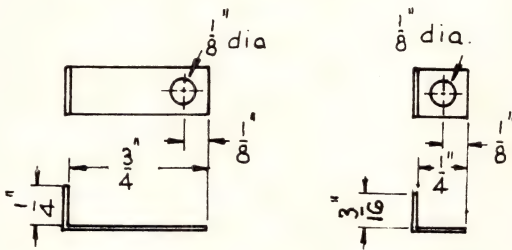
(a) for switching track sections to one or two controllers.

(b) for operating the "relay" type (permanently on) point motors, which was described in Journal No. 87.

The SPDT mini-switch is shown in Fig. 1. This shows that the switch is made of three pieces of ¼" x 20G brass strip, totalling 1 7/8" in all. Including brass metal threads, nuts and washers, the total cost would be about 10 to 15 cents per switch. Manufacture is simple and quick. Mounting is simply a matter of drilling three 1/8" holes in a hardboard panel and using 1/8" nuts and bolts to fit. To ensure a good contact, it may be necessary to bend the brass arm a little up or down after assembly. Colour code identification can be achieved by sliding 4mm P.V.C. tubing over the "handle" and cutting off about ¼". I use yellow for point control and red for power switching.

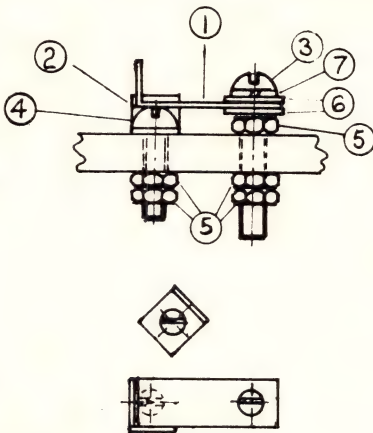
The second switch, shown in Fig. 2, is one for operating the conventional point motors (the "flash" type - H & M Tenshodo, Kumata, Peco, etc.). It is virtually the same as the one above, but has no "stopping brackets". This switch has its blade mounted higher by using either one more nut or a couple of brass washers under the blade. The idea is that the blade does not touch the heads of the screws until it is pressed down. The spring washer allows this springing without bending the blade. A 1" long blade with ¾" between screws will operate better if you have the extra panel space.





① BLADE

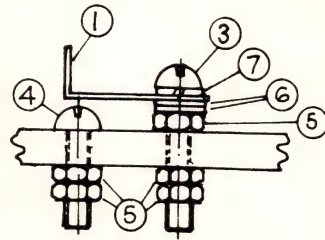
② STOP



## ASSEMBLY ON HARDBOARD.

1. Blade :  $\frac{1}{4} \times 20$  ga. brass strip. (1)
2. Stop " " " " (2)
3.  $\frac{1}{8}$  b.s.w.  $\times \frac{3}{4}$  Rd. hd. metal thread. (1)
4. "  $\times \frac{1}{2}$  " " " " (2)
5. " pressed nut. (7)
6.  $\frac{1}{8}$  brass washer. (2)
7.  $\frac{1}{8}$  spring washer (1)

FIG. 1 SPDT. DIAGRAM SWITCH



Refer fig.1 material list

FIG. 2 "FLASH TYPE

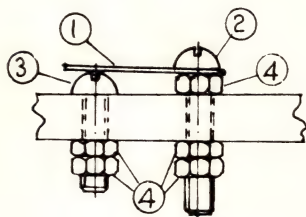
## DIAGRAM SWITCH

Note that both of these switches, when used on a diagram, are left in the position to which the points are set. This is a terrific advantage. Operators learn very quickly to trust the switches to indicate the route which has been set up.

A third and even simpler switch, is a press button type which is used either at dead ends or on loco shed roads, where one engine can be stored whilst another is moved. (See Fig. 3.) This is simply a straight piece of  $\frac{1}{4}$ " brass strip with one  $\frac{1}{8}$ " hole in one end. I could have used the same 20G brass and a spring washer for this switch, but as it could easily be bumped out of alignment with the "track" on the diagram, I used hard thin brass (.010" - .015") and clamped it tight at the mounting screw. The brass strip itself is the spring in this case. I use two of these on each of my loco shed roads. It not only keeps the first loco in "dead", but forces the second driver to be very conscious of the fact that he is closing up. (If he doesn't press this button, he stops short).

The last switch in the series is used for operating signals, which on my layout and that of the MMRS, lock in the "off" position and are restored by a passing train. For these I required two tiny spring push-buttons, one green and one red. Necessity was really the





1.  $1' \times \frac{1}{4}'' \times .036''$  hard brass
2.  $\frac{3}{4}'' \times \frac{1}{8}''$  Rd. hd metal thread.
3.  $\frac{1}{2}'' \times \frac{1}{8}''$  " " " "
4.  $\frac{1}{8}''$  pressed nut. (5)

FIG. 3. "DEAD END" SWITCH

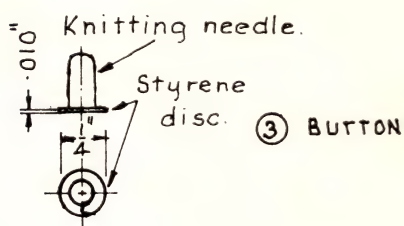
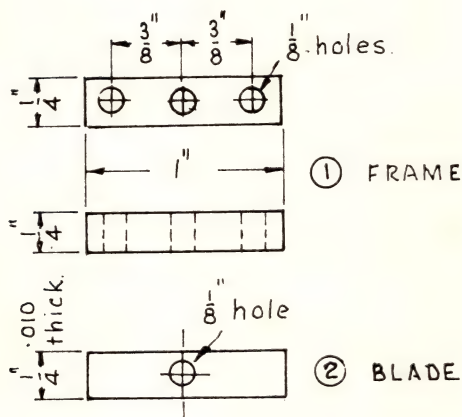
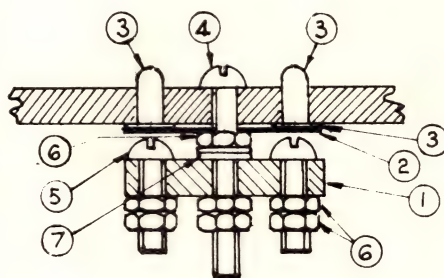


FIG. 4. SIGNAL SWITCH

mother of this invention, as in the case of my own layout, I completely forgot to leave space of my main panel for signal switches. The outcome of all of this was a two button switch which occupies a "plan" area of  $1'' \times \frac{1}{4}''$ . One would think that such a switch could not be robust. You can rest assured that any device which stands up to club operation is robust! These switches have been in use for over two years and no design bugs have been detected. They are shown in Fig. 4. Once again, to mount them it is only necessary to drill  $3 \times \frac{1}{8}''$  holes in a hardboard control panel. The bakelite was cut from a large piece obtained from a disposal shop. (Years of supply for 5 cents!). The red and green buttons are knitting needles from Coles. I found that the best buy is the type which has points on both ends. (Four



ASSEMBLY ON HARDBOARD.

1. Frame.  $1'' \times \frac{1}{4}'' \times \frac{3}{16}''$  Bakelite
2. Blade.  $1'' \times \frac{1}{4}'' \times .010''$  Brass or N/Silver
3. Buttons. made from  $\frac{5}{16}''$  of knitting needle glued to  $\frac{1}{4}''$  dia. styrene disc.
4.  $1'' \times \frac{1}{8}''$  Rd. Hd. Metal thread.
5.  $\frac{1}{2}'' \times \frac{1}{8}''$  " " " "
6.  $\frac{1}{8}''$  b.s.w. pressed nuts.
7.  $\frac{1}{8}''$  brass washers.



for 6 cents!)). As knitting needles are usually made of casein and I don't know a solvent type cement for casein, the washers (punched from a sheet of .010" polystyrene with a leather punch) had to be attached by using Selley's "Contact Adhesive", a glue which I often use when others won't work.

### The Mini-Panel.

Having dealt with the components, we can now discuss the panel. Being so small, it does not need any framing. I use hardboard (3/16" thick) and make two brackets from 1/2" x 1/8" mild steel bar, bent as required for mounting to the layout and to provide a suitable operating angle. I attach a "stiffening bar" under the top edge to prevent the long length of hardboard from bending. This is a strip of softwood with a cross-section of about 1 1/4" x 1/2", but the size is not critical. I lay out my tracks about 3/4" centre to centre and use an angle of about 40 degrees for points. After trying it all out on paper, I drew the whole on the hardboard. Next, the multitude of 1/8" holes is drilled and all is ready for assembly.

After assembly, the commoning wires are installed and attached with more 1/8" nuts on to the screws. The

"Dymotape" can now be fitted between the "stops", leaving the area within each switch area black. Section ends can be simulated by cutting about 1/8" out of the "track". I use gold Dymo, which stands out well on the raw hardboard and roughly matches the brass switches.

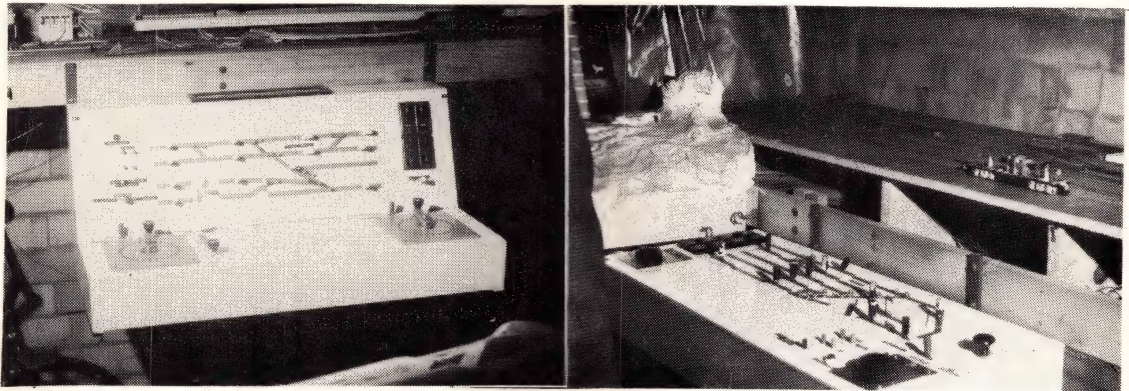
After mounting to the edge of the layout, it then only remains to connect the appropriate section, point, controller and power wires to the layout.

A picture is worth 1000 words in a case like this and Fig. 5 will show you what a section of the final panel looks like.

### Operation.

Set up a route by switching the points in the obvious way. If you are going to use the left side controller, swing all section switches on the route to the left and vice-versa for the right side controller. Press the appropriate green signal buttons.

The people who really appreciate these "diagram" panels are the visitors who wish to operate. They can become conversant with the correct operation in a matter of a few minutes.



Control panels on Stewart Westerman's Mousehaven Railway.



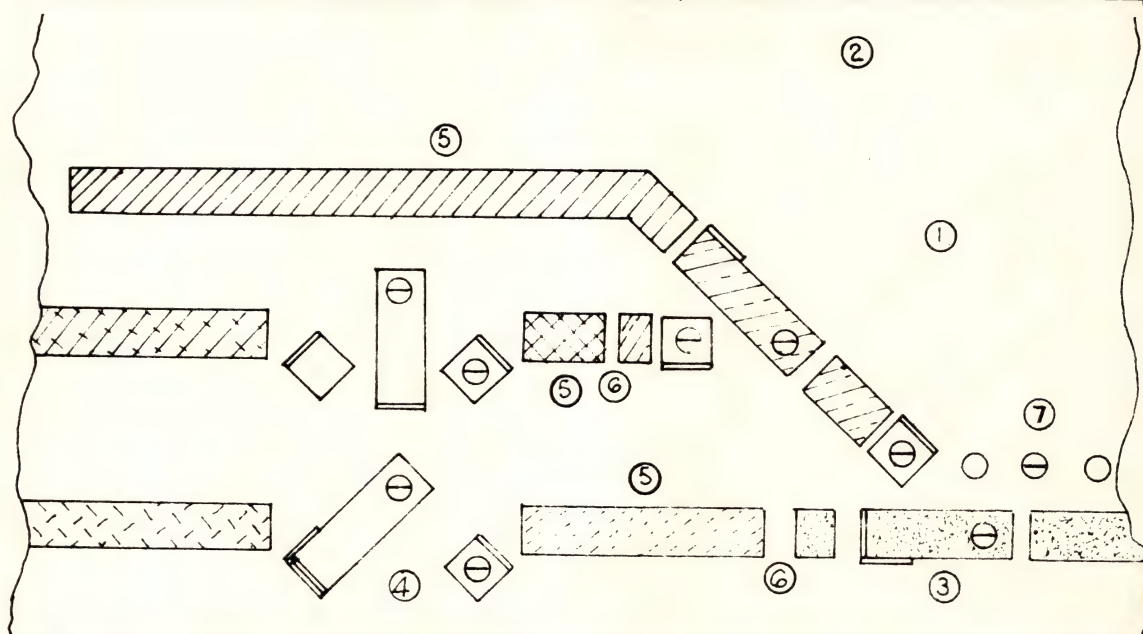
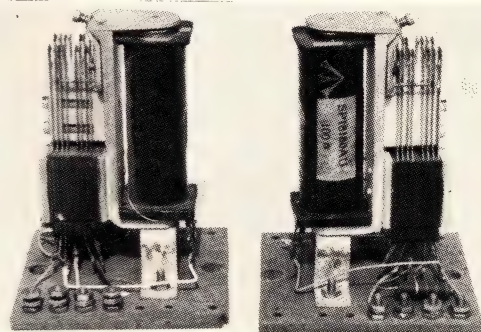
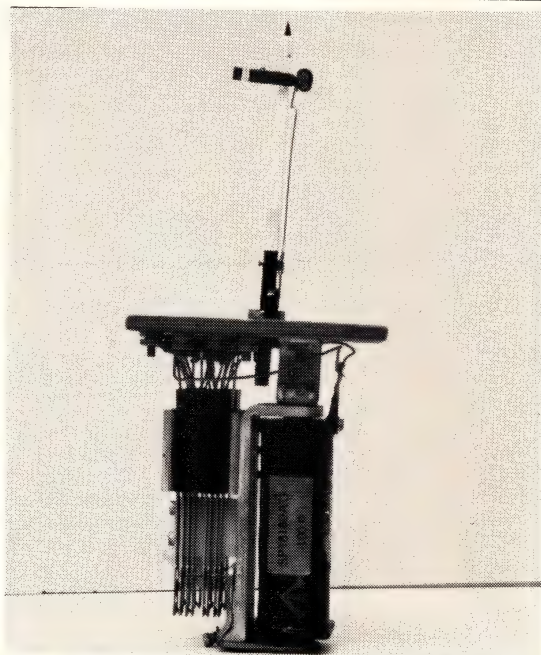


Fig. 5. Section of a Mini Panel. (Full Size).

- |   |                                     |
|---|-------------------------------------|
| 1. Hardboard panel.                                       | 5. Dymo tape.                       |
| 2. Stiffener underneath.                                  | 6. Gap in tape to show section end. |
| 3. Switch used for points.                                | 7. Signal switch.                   |
| 4. Switch used to switch section to 2 controllers or off. |                                     |



The signal relay mounted on the masonite baseboard.

Left. Relay fitted under the baseboard.  
'Signal above operated by a wire rod.

Points and signal motors as described in the July/August 1970 Journal.

Photos by R. Little.



# A Railroad Empire is Born

by RON CUNNINGHAM.

Several years ago a consortium was formed to discuss the feasibility of building a railroad to serve the large mining, industrial and timber complex being established in the consortium member's area. A feasibility study was called for and a report was duly submitted to the consortium. A brief summary of the reports' findings is as follows:

The area covered by the proposed railroad is large and the terrain diversified. It ranges from the mountainous regions of the mining and timber complex to the gentle foothills of the industrial area and the flat plains around the port, through which, much of the areas produce would pass. Construction will involve complex engineering problems, especially in the mountainous regions, with considerable tunnelling and bridge building being required.

The consortium considered that although the line would be economically sound, funds, and particularly labour were short, and therefore it was decided to go ahead with construction of the line at a pace dictated by the availability of labour for construction.

Construction would start with the port area, as this was the beginning of the line and by far the easiest section of the proposed line. Also once the port terminal was established and interchange facilities with the main continental line built, local industry would provide revenue for the railroad. The terminal would be the railroad headquarters, with engine facilities and workshops being located here.

From the port area the line would gradually be extended to the industrial

township in the hills and from there to the mining and timber complex in the mountains as they were established.

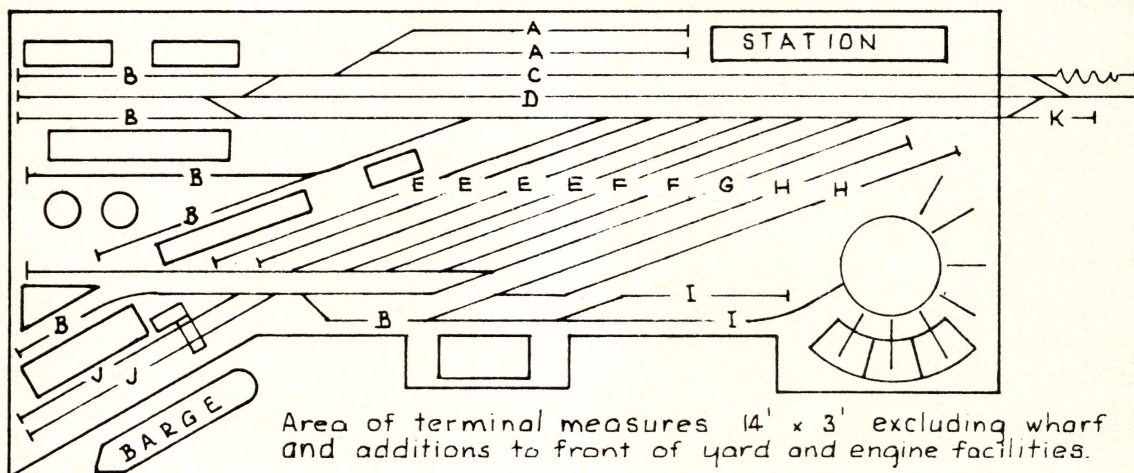
Once complete, the railroad's revenue would come almost entirely from freight with mining and timber being the major revenue producers. Limited passenger services would be run.

On this basis the construction of the line began. Right of way for the railroad was obtained and site preparations for the terminal began. This required the removal of much soil and the laying down of a suitable base on which to build the terminal. This has now been completed and track laying is about to commence.

The road superintendent is arranging for procurement of rolling stock and already a considerable amount is on hand. Because of the line's limited financial resources the motive power will consist mainly of steam locos, procured from other lines, although two diesel units are on hand. Also a line connecting the terminal with the main continental line will be built so a wide variety of rolling stock on interchange will probably be seen.

Well that's as far as the line has progressed so far, but the coming of the railroad has already effected local business. Structures are going up, or being planned and many industries are asking for their own siding, which the railroad will happily supply in due course. The railroad as yet has no name, but its prosperity and continued operation seems assured. I hope to report on its further progress in the near future.





- A. Passenger car storage.
- B. Industrial sidings.
- C. and D. Station arrival and departure (C runs off to join continental line, D is main road line).
- E. Freight car storage.
- F. Freight make up and break up. (Track D may be used if F is too short)
- G. Access to port and engine facilities.
- H. Work and wreck train storage.
- J. Wharf tracks.
- K. Yard lead.

### FOR SALE.

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Lapel badges	.50
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Cuff links - nickel	1.50
gold	1.50

The above are available in NSW from Mr. K. Robinson, 26 Lilac St. Punchbowl, 2196, or in Victoria Mr. S. Westerman, 10 Gardenia Crescent, Cheltenham 3192.

The Iron Horse, 33 Lowerson Street, Lutwyche, has discontinued model railway business, do please disregard the Shop Spy report in the Jan/Feb Journal.

For the best ever record of Australian Steam Locos, get a copy of "Steam in the Sunshine State". This is a 12" long play record of Q.G.R. steam locos at work.

For a review of this record see the "Australian Model Railroad Magazine", Nov/Dec. issue. Then buy yourself a copy of the record which is available from the A.R.H.S., P.O. Box E129, St. James 2000, or from your local A.R.H.S.



# Branch Reports

## QUEENSLAND.

Our first meeting for 1971 was at the flat of Dr. Stephen Suggit. Doc. showed us a model of a G.W.R. (England) 47XX class 2-8-0 that he is building in S. gauge. Visitor Dave Jenkins showed his model (also under construction) of the same loco in 00 gauge. Another visitor, Ian Norman, showed an O gauge G.W.R. "King" class under construction and also bogie sides he has been casting for HOn3½ models. We also listened to records of Q.G.R steam locos and L.N.E.R. A3 class Pacifics.

Future meetings include an auction and a barbeque. Until we are able to arrange for new club rooms, meetings will be only on the 1st Thursday of the month at members' homes.

For details of meetings, contact me at 142 Northgate Road, Northgate 4013, or ring me at 24-2473 during working hours.

Any interstate member visiting Brisbane and who cannot attend a regular branch meeting is invited to contact me and I will arrange for them to meet the Brisbane members.

ARTHUR ROBINSON.

## NEW SOUTH WALES.

Saturday, 6th February, 1971, was the NSW Branch Annual General Meeting with a good attendance of 42 members and a few visitors. It was pleasing to see a number of new members in the committee and we wish these members the best in their work on the committee. The following is a list of the Office Bearers:

President	G. Larmour
Vice-President	G. Durham

Secretary	P. Kelly
Treasurer	J. Skilton
Committee	A. Brown, J. Fotheringham, K. Brown, N. Read, G. Bray, B. Day, H. Warren, K. Robinson, K. Edwards, R. Gallagher, L. Lumsden, J. Dunn, R. Grey.

Branch Reporter L. Fordham.

Members of the Branch who have not contacted the Federal Registrar with the latest information of modelling details regarding gauge and if the layout is operational, are asked to forward the details to the Federal Registrar, 26 Napoleon St., Rosebery, N.S.W. 2018.

At the clubrooms we have one operating layout and another layout being modified to fit around the wall for end to end operations. If more members are able to be present to help in any construction of this layout we will soon have two operating layouts.

For the benefit of members the clubrooms are now open four times per month, the first and third Saturday afternoons from 2 p.m. and the second and fourth Friday nights from 7-30 pm.

It is hoped more members will attend meetings and help justify the opening of the clubrooms on this more frequent basis. The clubrooms are for the use and benefit of all members.

The Royal Blind Society has approached the Association in regard to exhibiting the layout at Roselands for one week in July. This will present difficulties in staffing the layout and members who could be available during the week are asked to contact the Secretary, Phil Kelly.

A modelling clinic has been arranged



and all members should be able to find some items of interest from the programme. Members with any questions or suggestions for the modelling clinic should contact Mr. R. Gallagher at branch meetings.

#### April.

Sat. 17th. Working Bee.

Fri. 23rd. Film Night - "Western Endeavour" by R. Farguhar.

#### May.

Sat. 1st. Layout operation.

Fri. 14th. Modelling & layout operation.

Sat. 15th. Silastic Moulding Demo.

Fri. 28th. Guest speaker from A.R.H.S.

#### June.

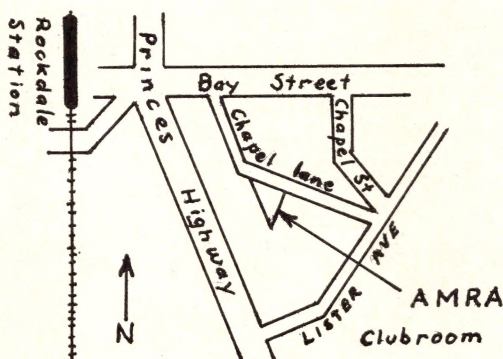
Sat. 5th. Open Day - Members of all Model Railway Clubs welcome.

Fri. 11th. Modelling & layout operation.

Sat. 19th. Visit-SLSS Darval Park, Ryde.

Fri. 25th. Scenery clinic.

LES FORDHAM.



#### VICTORIA.

Meetings are held at All Saints Church Hall, Glenferrie Road, Kooyong.

(opposite Scotch College) Commencing at 8.0 pm. on the second Thursday of each month, except January.

JOHN SNEDDON.  
(Hon Secretary)  
Phone 49-2799.



#### Social Notes.

Saturday night, 29th May, in the function room at the Camberwell Civic Centre a B.Y.O. Cabaret Style Social evening will be held for senior members only. Enquiries and tickets (\$2.00 a double) from Mal Baker. Bookings must be made by 13th May i.e. at the branch meeting.

## News From Other Clubs

#### PROSPECT MODEL RAILWAY CLUB.

It is with great pleasure, that the Prospect Model Railway Club have joined the ranks of AMRA and sincerely hope that other clubs will follow this lead.

The P.M.R.C. was formed in July 1968 and now numbers 23 fully financial members. Meetings are held on the 2nd and 4th Saturdays of the month. Until our clubrooms are built, meetings are being held at Seven Hills.

Our Secretary, Mike Guest, 31 Birch Street, St. Marys, will be happy to answer any enquiries.

MIKE GUEST.

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